

## Shallow Resistivity Structure around Iwo-Yama, Kirishima Volcanoes

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Iwo-Yama, Kirishima Volcanoes had active geothermal areas, but its activity turned to decrease from the middle of 1990's. It was found that significant geothermal activity disappeared in July, 2007(Unai et al, 2007). Shallow resistivity structure around Iwo-Yama was inferred from VLF and ELF-MT by Kagiya et al.(1994). We carried out VLF measurements at 41 points, and AMT measurements at 7 points around Iwo-Yama, and examined the temporal change of the structure. This research will clarify the relationship between decrease of geothermal activity and the change of the shallow resistivity structure.

As a result of the observations, the followings have been clarified. Resistivity increased in all sites, especially in high-frequency ranges (20 Hz). This means that resistivity increased in the shallower part. According to the 1-D inversion, resistivity structure has almost the same feature in both observations; conductive layer beneath more resistive surface. But in detail, the thickness of the resistive surface layer was found to be increase. This change may be caused by the decrease of the geothermal activity.